

**REMARKS**

Claims 26–66 are pending in this application. Non-elected claims 33–66 are withdrawn from consideration by the Examiner. By this Amendment, the specification and claims 26, 34, 35, 38, and 39 are amended. Support for the amendments to the claims may be found, for example, in the original claims and in the specification at page 13, lines 6–19. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Claim for Priority**

A Claim for Priority to FR 0450600 was indicated in the ADS filed with the application on August 28, 2006. The Office Action acknowledges receipt of the certified copy of the priority application. The Examiner is requested to acknowledge the claim for foreign priority and receipt of the certified copy of the priority application in the next Office Action Summary.

**II. Objection to the Specification**

The Office Action objects to the specification for not having a heading preceding the section where a brief description of the drawings is given. As indicated above, the specification is amended to supply the heading "Brief Description of the Drawings." Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

**III. Claim Objections**

The Office Action objects to claims 26–32 because they specifically recite non-elected subject matter. On the other hand, the Office Action indicates that Applicants will be entitled to rejoinder and consideration of the non-elected species upon allowability of the generic claims. Because the claims have not been finally rejected, Applicants respectfully submit that such an objection is premature and should be held in abeyance until prosecution on the merits

is closed. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

**IV. Rejection under 35 U.S.C. §112, Second Paragraph**

The Office Action rejects claims 26–32 as being indefinite under 35 U.S.C. §112, second paragraph. Applicants respectfully traverse the rejection.

**A. "a detectable marker or at least two detectable markers interlinked by at least one multimeric structure"**

By this Amendment, claim 26 is amended to replace the term "marker" with "label." The specification clearly defines a “detectable label” and provides a non-limiting list of these detectable labels. *See* specification, page 13, lines 6–19.

A definition of “multimeric structure” is found in the specification at page 12, beginning at line 22, where it provides:

The term "multimeric structure" is intended to mean a polymer formed of repeat units of chemical or biological synthons. An example is mentioned in example 34.2 of the description of patent application WO-A-02/090319. Those skilled in the art are requested to refer to this document should they find the information developed hereinafter insufficient for their complete understanding of this subject. Many variants of such structures which can be used in the present invention are known, such as, for example:

- linear polymers (EP-A-0.561.722, EP-A-0.669.991),
- branched polymers (WO-A-01/92361),
- particles (EP-A-0 827 552),
- dendrimers (US-A-4,507,466; US-A-4,568,737; US-A-6,083,708),
- polynucleotides, and
- polypeptides.

Should it prove necessary, those skilled in the art can also refer to these documents for a complete understanding of the subject.

As such, Applicants respectfully submit that one skilled in the art would be able to ascertain the meaning of these terms in light of the sections of the specification cited above, and 35 U.S.C. §112, second paragraph, is satisfied. *See* MPEP §2173.02.

**B. "a linker arm comprising a linear chain of at least two covalent bonds"**

The Office Action asserts that because the terms "are not specifically defined," the metes and bounds cannot be determined, rendering the claims indefinite.

First, Applicants respectfully submit that the Office Action fails to specify which terms it considers indefinite. It is unclear whether the Office Action refers to "linker arm" or "linear chain" or some other portion of the above-quoted claim limitation.

Second, just because a term or phrase is not expressly defined in the disclosure does not necessarily render a term indefinite. As provided by MPEP §2173.02, the essential inquiry is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- a. The content of the particular application disclosure;
- b. The teachings of the prior art; and
- c. The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

MPEP §2173.02 also states that "a claim term that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible" citing to *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, (Fed. Cir. 2004) for its holding that the disputed claim term "surrender value protected investment credits" that was not defined or used in the specification was discernible and not indefinite because "the components of the term have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence."

Here, the entire limitation reads "L is a linker arm comprising a linear chain of at least two covalent bonds and n is an integer equal to 0 or 1." The placement of "L" in formula (0) and its relationship to the other elements recited in claim 26 are clearly defined. Although

"linker arm" is not expressly defined in the specification, the claim itself at least partially defines "L" as "comprising a linear chain of at least two covalent bonds." Although this may encompass many structures, there is limiting structure provided that defines the metes bounds of the claim. Also, breadth does not equate to indefiniteness.

**C.     "a linker arm comprising at least one covalent double bond enabling the conjugation of the diazo function with the aromatic ring"**

For similar reasons to those presented above, this term is also not indefinite. Here, the entire limitation reads, "A is a linker arm comprising at least one covalent double bond enabling the conjugation of the diazo function with the aromatic ring and u is an integer between 0 and 2." The placement of "A" in formula (0) and its relationship to the other elements recited in claim 26 are clearly defined. Although "linker arm" is not expressly defined in the specification, the claim itself at least partially defines "A" as "comprising at least one covalent double bond enabling the conjugation of the diazo function with the aromatic ring." Although this may encompass many structures, there is limiting structure provided that defines the metes and bounds of the claim.

**D.     Conclusion**

In addition to the arguments presented above, it is respectfully submitted that similar or identical terms are found in U.S. Patent No. 7,338,805 to Bourget et al. ("Bourget"), which the Office Action applies in rejecting claim 26 as discussed below. *See, e.g.*, Bourget at abstract and claim 1. Thus, it appears that there are some structural features in common between the pending claims and those that issued in Bourget. However, there are patentable differences between the two sets of claims. Looking at the claims as a whole, the pending claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity that allow one of skill in the art to determine what will infringe the claims. Accordingly, reconsideration and withdrawal of the rejection are requested.

**V. Rejection Under 35 U.S.C. §102**

The Office Action rejects claim 26 under 35 U.S.C. §102(b) over Bourget. Applicants respectfully traverse the rejection.

By this Amendment, claim 26 is amended to recite, "-Z- represents -NH-, -NHCO-, or -CONH-" and to delete from this grouping "-O-." As such, claim 26 does not read upon the non-elected species asserted by the Office Action that is taught by Bourget. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

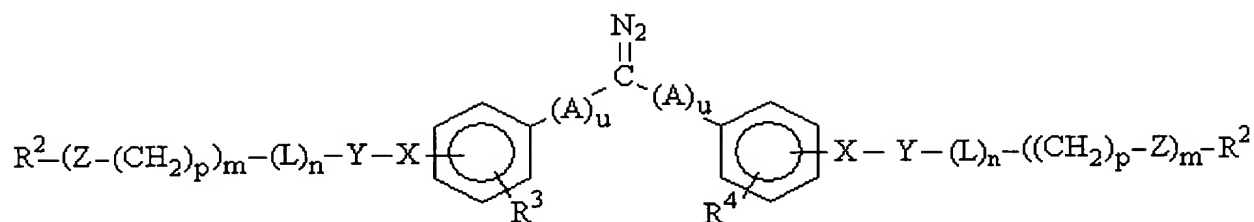
**VI. Obviousness-Type Double Patenting Rejection**

The Office Action rejects claim 26 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–20 of Bourget. Applicants respectfully submit that the amendments made to claim 26 that overcome the §102 rejection over Bourget also overcome the double patenting rejection. Reconsideration and withdrawal of the rejection are respectfully requested.

**VII. Request for Rejoinder**

Because generic claim 26 is believed to be patentable over Bourget for at least the reasons discussed above, Applicants respectfully request rejoinder and examination of the non-elected species. Also, because non-elected claims 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 55, 57, 59, 61, 63, and 65 each depends from product claim 26 and, thus, requires all the limitation of claim 26, their rejoinder and examination are also respectfully requested.

Furthermore, Applicants also respectfully request rejoinder and examination of independent product claim 34 and each of its dependent claims. Claim 34 is directed to a temperature-stable labeling reagent of formula (6):



where  $R^2$ ,  $R^3$ , X, Y, Z, L, and A are the same as set forth in claim 26. As such, the half-structure of the above formula is almost the same as formula (0). Therefore, there are many structural elements that are in common between the two general formulas, including the structural element of  $-(Z-(CH_2)_p)_m-$  where "Z" represents -NH-, -NHCO-, or -CONH-. As discussed in the previous Amendment, this structural element has the following inventive features:

...the use of polyaminated arms...make it possible to distance the biotin from the reactive center (diazo function). Thus, a better solubility in aqueous medium is obtained through the introduction of the hydrophilic arm, with the possibility of protonation of the amines in an aqueous medium at neutral pH, which produces an attraction between the nucleic acids, which are negatively charged, and the label, with two main consequences:

- more rapid labeling, which may be particularly advantageous for samples at low concentration, and
- stabilization of the double helix by neutralization of the negative charges of the phosphates.

See specification at page 3, line 23 to page 4, line 4.

Because Bourget does not disclose this structural feature, this feature combined with the other structural features that are common to all the claims defines a contribution over the prior art. Thus, there is a special technical feature shared between independent claims 26 and 34 and, indeed, between all the claims. Therefore, unity of invention exists between all the claims, and Applicants respectfully request that the restriction requirement be withdrawn and all the non-elected claims and species be rejoined and examined.

**VIII. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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